

BRITISH COLUMBIA
ARCHAEOLOGICAL
RESOURCE MANAGEMENT
HANDBOOK



Province of British Columbia
MINISTRY OF MUNICIPAL AFFAIRS, RECREATION AND CULTURE

ARCHAEOLOGY BRANCH

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ARCHAEOLOGICAL RESOURCES

Archaeological resources consist of the physical remains of past human activity. These resources may be of regional, provincial, national or international significance. The scientific study of these remains, through the methods and techniques employed in the discipline of archaeology, is essential to the understanding and appreciation of prehistoric and historic cultural development in British Columbia.

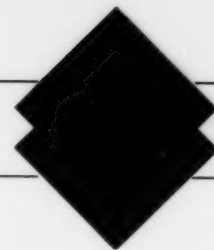
Some examples of archaeological resources include: an 8,000 year old Indian campsite in the Fraser River Canyon, an 18th century fur trade fort on the Peace River, and a 19th century shipwreck off the West Coast.

These resources are often very susceptible to disturbance and are non-renewable and finite in number.

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INTRODUCTION



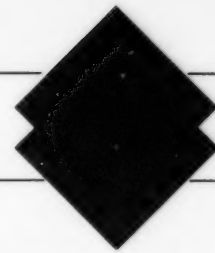
This **Handbook** is a summary of **Archaeological Impact Assessment Guidelines** (Archaeology Branch 1989). These **Guidelines** apply principally to development projects which, by virtue of their scale, location, extent of impact, administrative or jurisdictional complexity, or other factors, are subjected to British Columbia's environmental impact assessment and review processes. However, they may also be applied, with minor modification, to all other developments.

A particularly important characteristic of the **Guidelines** is their flexibility. They are not intended to be used as a "cookbook" approach to all development projects. Although certain categories of information are needed for decision making, each archaeological study must be tailored to meet specific project characteristics and needs.

The extent of work, particularly in the preliminary stages of project planning, needs to be coordinated with the proponent's level of commitment to the project. Representatives of the Archaeology Branch will meet directly with the proponent to provide project-specific clarification and interpretation of the **Guidelines** where necessary. Depending on the project, considerable flexibility can be expected in the staging of impact assessment and management studies, the level of detail at which these studies are undertaken, and the reporting requirements.

Archaeological assessment and review procedures are under continual review, and may be modified or altered as the provincial government's overall environmental impact assessment and review process evolves.

LEGISLATION AND ADMINISTRATION



Legislation

The *Heritage Conservation Act* (1979 R.S.B.C. Chap. 165) provides for the protection of British Columbia's archaeological resources. This legislation applies to archaeological sites whether they are located on public or private land.

In accordance with the *Act* (section 6), archaeological sites may not be destroyed, excavated or altered without a permit issued by the Minister or his designate. The *Act* affords considerable discretionary authority in determining if, and under what conditions, such permits are to be granted (section 5).

Section 7 of the *Act* empowers the Minister to order a "site survey" or a "site investigation" where, in his opinion, land contains an archaeological site which may be damaged or destroyed. The purpose of a site survey is to assess the archaeological significance of land or other property. Site survey determines the presence of archaeological sites which warrant protection, or are already protected, under the *Act*. A site investigation is undertaken in order to recover information which might otherwise be lost as a result of site alteration or destruction.

Archaeology Branch

Management of the province's heritage resources is shared by the Archaeology Branch, Heritage Conservation Branch and Heritage Properties Branch. Responsibility for managing British Columbia's archaeological resources lies with the Archaeology Branch, whereas the Heritage Conservation Branch is responsible for managing historic buildings and sites. The Heritage Properties Branch manages heritage sites owned, developed and operated by the province. These Branches contribute to the provincial process for determining priorities and establishing

regulations governing land use and development.

Archaeological sites are valuable provincial resources, as are mineral deposits, arable land, forests, and fish and wildlife. In addition to their scientific and public value, archaeological sites may also have economic value to B.C.'s recreation and tourism industries. The protection of significant archaeological sites so that their intrinsic values may be realized is important. However, the use of land for this purpose must often be compared with other viable uses the land base is capable of supporting.

Objectives

The role of the Archaeology Branch is not to prohibit or impede land use and development, but rather to assist the development industry, the province, regional authorities, and municipalities in making decisions which will ensure rational land use and development.

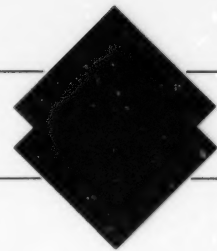
When the benefits of a project are sufficient to outweigh the benefits of archaeological preservation, the Branch's primary concern is to work with the proponent in determining how the project may be implemented with minimal archaeological resource loss and minimal effect on the development. Where the loss of significant archaeological values cannot be avoided, the role of the Branch is to ensure that appropriate compensatory measures are implemented.

The following objectives reflect archaeological resource management policy in British Columbia:

- to ensure that potential impacts on archaeological resources are assessed and managed through participation in provincial environmental review and approval processes,
- to assist public and private sector management and development agencies in the design and implementation of effective integrated resource management plans,
- to manage archaeological resources through administration of the *Heritage Conservation Act*,
- to assist other resource Ministries and non-government organizations in promoting the conservation, development and public appreciation of archaeological resources,
- to provide advice and assistance to the Ministry executive for representations to Cabinet committees of Environment and Land Use, Sustainable Development and Native Affairs.

In managing archaeological resources, the Branch endeavours to develop a co-operative relationship with project proponents.

ARCHAEOLOGICAL IMPACT ASSESSMENT & REVIEW PROCESS



Introduction

Archaeological impact assessments are initiated in response to proposed development projects which will disturb or alter the landscape, thereby potentially endangering archaeological sites. Major development projects of this nature normally proceed through four general stages of project planning: pre-feasibility or prospectus; feasibility or preliminary planning and design; final design, licencing and approval; and project implementation and operation. At each stage in this general planning process, a particular type of archaeological investigation is undertaken to meet specific project objectives and needs.

The archaeological assessment process is comprised of two principal components:

assessment and impact management. Assessment is primarily concerned with the location and evaluation of archaeological resources, and the assessment of impacts during the initial stages of project planning. Impact management follows directly from assessment and is primarily concerned with managing unavoidable adverse impacts as well as unanticipated impacts. It is important to recognize that the assessment and impact management stages are approached sequentially in association with specific levels of project planning. Moreover, each new stage in the process is highly dependent upon results and recommendations made in the preceding stage.

Roles and Responsibilities

The main participants in the archaeological assessment process include:

- project proponents,
- archaeological consultants,
- the Archaeology Branch, and
- project coordinating committees representing various provincial Ministries, or approval agencies at regional and municipal levels.

Project Proponents and Consultants

Proponents are encouraged to consider archaeological concerns in their project planning and design from the outset.

This will minimize scheduling and budget difficulties at later stages. As participants in the archaeological assessment process, proponents are responsible for:

- complying with all orders and permits issued under the *Heritage Conservation Act*.
- implementing assessment and impact management studies, and
- reporting the results of these studies to the Archaeology Branch.

Archaeological assessment and management studies are conducted at

all stages of project planning. If qualified staff are unavailable within the development agency, the proponent should contract the services of a professional archaeological consultant. A list of consultants who offer their services in B.C. is maintained by the Branch and is available upon request.

Qualified consultants should be concerned with designing research strategies, conducting archaeological impact assessment and management studies, and recommending courses of action. The responsibility for final decisions concerning the management of archaeological resources is vested with the Branch.

Archaeology Branch

The Branch exercises various responsibilities that include:

- establishing impact assessment and management guidelines, professional standards, and reporting requirements,
- reviewing development proposals to determine the proponent's required level of involvement in the archaeological assessment process,
- preparation of "orders" and "permits" pursuant to the *Heritage Conservation Act*,
- providing guidance or direction to the proponent and consultants throughout the archaeological assessment process,
- providing consultants with access to archaeological site files, maps, and other documentary materials maintained within the Ministry,

- monitoring field aspects of archaeological impact assessment and management studies for compliance with terms and conditions of "orders" and "permits,"
- reviewing reports and research proposals for relevance, completeness and objectivity, and
- establishing terms and conditions for project approval.

Provincial Project Coordinating Committees

Three major provincial committees are involved in the archaeological assessment process by providing general direction and coordination of the province's overall environmental assessment and review process. These are the Energy Project Coordinating Committee, Mine Development Steering Committee, and Major Project Steering Committee. These committees work directly with the proponent and the Branch to clarify requirements or provide general advice on assessment and review procedures at various stages in the approval process. They also coordinate review comments, advice or queries the Branch may have regarding a proponent's archaeological assessment and management studies.

Small-scale developments, such as residential subdivisions and oil and gas exploration, are often directly referred to the Branch by approving officers for agencies such as the Ministry of Transportation and Highways and the Ministry of Energy, Mines and Petroleum Resources.

Review Procedures

The Branch may conduct three or four formal reviews for major project developments. The first involves an examination of the proponent's initial development proposal or "prospectus"

to determine whether further involvement in the archaeological assessment process is required. Therefore, the "prospectus" should include an archaeological overview. The

second, third and fourth reviews, if necessary, are to evaluate the overview (where not done in the prospectus), inventory, and impact assessment reports.

Archaeological assessment reports should be received by the Branch as early as possible in the project planning process. Early Branch review will provide maximum lead time for correcting report deficiencies and planning and implementing subsequent archaeological investigations, and will also minimize possible expense and delay to the proponent. Where report deficiencies are identified, the Branch may request that these be rectified immediately or, depending on the nature of the deficiency, in a following stage of the assessment process. However, in either case, the Branch will assist proponents in satisfying report requirements. Unless the proponent demonstrates otherwise, final reports received by the Branch are considered public information.

Overview

The archaeological overview report is intended to identify and assess archaeological resource potential or sensitivity within a proposed development area. Identification of options concerning the appropriate methodology and scope of work for inventory and/or impact assessment studies is also expected.

Overview studies should include:

- a background library and records search of ethnographic, archaeological and historical documents pertinent to the study area,
- a statement of archaeological resource potential and distribution in the study area,
- a judgmental assessment of anticipated impacts in light of proposed development plans, and

- identification of a "preferred" project alternative (where applicable), as well as recommendations for further archaeological impact assessment studies.

Overview studies are particularly important with respect to large-scale development projects such as hydro-electric dams, transmission lines, pipelines, open-pit mines, etc. More site-specific projects such as residential subdivisions, manufacturing plants, port facilities, etc., may effectively combine the overview with an inventory study.

Inventory

The inventory study involves a program of in-field identification and recording of archaeological resources within a proposed development area. The nature and scope of this type of study is defined primarily by the results of the overview. In the case of site-specific developments, direct implementation of an inventory study may preclude the need for an overview.

There are a number of different methodologies which may be utilized in conducting inventory studies. The proponent and/or his archaeological consultant must develop an appropriate study plan for the proposed inventory. The Branch will review and comment upon the proposed methodological approach prior to implementation.

Impact Assessment

Impact assessment studies are only required where potential conflicts have been identified between archaeological resources and a proposed development. These studies require a detailed description of the particular archaeological resource to be adversely affected, as well as an assessment of the nature and extent of the impacts expected. The purpose of the assessment is to provide recommendations as to the most

appropriate manner in which the resource may be managed in light of the identified impacts. Management options may include: alteration of proposed development plans to avoid resource impact; mitigative studies directed at retrieving resource values prior to impact; or compensation for the unavoidable loss of resource values.

There are a variety of procedures which may be useful in performing an impact assessment. The proponent and/or his archaeological consultant must develop an appropriate assessment proposal to be submitted to the Branch for review prior to implementation.

Mitigation/Compensation

Studies involving mitigation and/or compensation are only undertaken in situations where unavoidable conflicts between archaeological resources and a proposed development are identified. The nature and extent of these studies will have been determined in the impact assessment.

In the case of mitigative management, some form of systematic data recovery, analysis and interpretation of specific

archaeological resources will be involved. The proponent and/or his archaeological consultant will be required to submit a detailed research proposal to the Branch prior to initiating these studies.

Surveillance/Monitoring

Surveillance and/or monitoring programs are generally necessary when impact assessment studies have recommended the implementation of resource management measures designed to protect archaeological resources during project construction. These programs are also implemented where archaeological resources are considered to have a high probability of occurring in a proposed development zone, but are not likely to be identified through an inventory study (e.g. deeply buried sites). Therefore, surveillance and monitoring are designed to ensure compliance with impact management requirements, as well as the implementation of emergency management measures should archaeological resources be unexpectedly uncovered during the course of development.